

REMARKS

In accordance with 37 C.F.R. § 1.111, Applicants respectfully request reconsideration, in light of the claim amendments presented above and the following remarks, of the claim rejections set forth in the non-final Office Action dated October 29, 2010 (the “Office Action”).

I. Examiner Interview

Applicants thank Examiner Chen for the telephone interview dated January 18, 2011 with Applicants’ Agent, Tyler Webb (Reg. No. 66,748). During the telephonic interview, the 35 U.S.C. § 103(a) rejection of claim 1 was discussed. The following remarks are in furtherance of the interview.

II. Claim Rejections – 35 U.S.C. § 103(a)

Claims 1, 5, 7, 8, 15, 19, 21, and 22 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Marian (U.S. Patent No. 5,913,688) in view of Kaczmarek et al. (U.S. Patent No. 6,542,577), Rockwood et al. (U.S. Patent No. 6,316,768), and Tilton et al. (U.S. Patent No. 6,108,201). Claims 9-11 and 23-25 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Marian in view of Kaczmarek et al., Rockwood et al., Tilton et al., and further in view of Powell (U.S. Patent No. 6,931,723).

A. Independent Claim 1

Amended independent claim 1 recites a pressure plate that contacts an underside of the printed circuit board and is mounted on the housing such that “the pressure plate presses the first layer of the printed circuit board against the seal around the opening in the housing such that the first layer of the printed circuit board forms the liquid tight closure that prevents the coolant oil from flowing out the opening in the housing.”

As acknowledged by the Examiner in the Office Action dated November 9, 2009, Marian, Kaczmarek et al., and Rockwood et al. do not disclose “a pressure plate [that] contacts the underside of the printed circuit board and presses the printed circuit board against the seal.” *See*, p. 10. Accordingly, Marian, Kaczmarek et al., and Rockwood et al. do not disclose a pressure plate that “presses the first layer of the printed circuit board against the seal around the opening in the housing such that the first layer of the printed circuit board forms the liquid tight closure that prevents the coolant oil from flowing out the opening in the housing,” as recited in independent claim 1.

Tilton et al. fail to fill the gaps. Tilton et al. disclose at least one spray plate and printed circuit board that are carried within a coolant-tight enclosure such as a spray module 300. *See*, col. 3, lines 17-20. As shown in Figure 5, Tilton et al. discloses a shroud 400 that is adapted for support by a chip carrier assembly 500 and directs the spray from one or more spray nozzles onto the surface of a large integrated circuit 222. *See*, col. 4, lines 54-58. The chip carrier assembly 500 includes a chip carrier 502, which supports the large integrated circuit 222, an I/O interface pad 504, a pressure plate 506, and a backing plate 508. *See*, Fig. 5; col. 4, lines 37-40. The chip carrier 502 is mounted on the I/O interface pad 504, which in turn is carried by a first side of the printed circuit board 200. *See*, col. 4, lines 42-44. The backing plate 508 is located on a second side of the printed circuit board 200. Support bolts 510 and associated fasteners secure the pressure plate 506 and the backing plate 508, squeezing the chip carrier 502, the interface pad 504, and the printed circuit board 200 between the pressure plate 506 and the backing plate 508. *See*, col. 4, lines 45-53. A base 408 of the shroud 400 is also anchored to the support bolts 510 of the chip carrier assembly. *See*, col. 5, lines 5-7. Tilton et al. disclose a pressure plate 506 that contacts a side of a chip

carrier 502 and is mounted on a printed circuit board 200 such that the pressure plate 506 presses the chip carrier 502 against an I/O interface pad 504. Tilton et al. do not, however, disclose a pressure plate 506 that is attached to a housing (e.g., the spray module 300). Therefore, Tilton et al. do not disclose a pressure plate that “presses the first layer of the printed circuit board against the seal around the opening in the housing such that the first layer of the printed circuit board forms the liquid tight closure that prevents the coolant oil from flowing out the opening in the housing,” as recited in independent claim 1.

Marian, Kaczmarek et al., Rockwood et al., and Tilton et al. do not disclose the limitations discussed above. Therefore, independent claim 1 is allowable over the cited references because Marian, Kaczmarek et al., Rockwood et al., and Tilton et al., either alone or in combination, fail to disclose the claimed subject matter.

Claims 5 and 7-11 depend, either directly or indirectly, from allowable independent claim 1 and are allowable for at least this reason.

B. Independent Claim 15

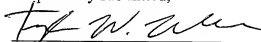
Independent claim 15 was amended to include features consistent with those discussed above for allowable independent claim 1. Accordingly, independent claim 15 is allowable over the cited references for consistent reasons. Dependent claims 19 and 21-25 depend, either directly or indirectly, from allowable independent claim 15 and are allowable for at least this reason.

Conclusion

For at least the reasons presented above, the Applicants respectfully submit that the pending claims are in condition for allowance.

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Tyler W. Webb', written over a horizontal line.

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